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Language assessment of deaf children – where are we now?

Rosalind Herman & Wolfgang Mann, City University London

For a long time, language assessment of deaf children was rarely addressed by researchers. Common practice was to use and adapt tests designed for hearing children, or make more subjective assessments (Herman, 1998a). Although language tests designed for hearing children continue to be used in some situations, e.g. with oral deaf children who have received early cochlear implants, their use is not always appropriate. This may be for a number of reasons (and here we mention only a few). First, standard test administration procedures may not meet the needs of a deaf child (e.g. rate of presentation, numbers of allowed repetitions, etc). Second, the language used in tests or individual test items may be unfamiliar to a deaf child or difficult to speechread. Third, English-based tests cannot simply be translated into BSL or SSE (or any other language) and considered equivalent in terms of what they are measuring. Finally, test norms have only limited validity when applied to deaf children whose language exposure and experience is often so different from those upon whom the test was developed.

So what is involved in developing language assessments for deaf children? At its most basic level, developing language tests involves identifying appropriate areas to assess and determining patterns of typical development. The latter requires a large population from which to select a representative sample. However, in the case of deaf children, we are dealing with a population that is both small and highly heterogeneous. In addition to factors such as onset of language and communication at home, there are growing numbers of children from minority backgrounds and children with additional disabilities. There are changes in technologies (newborn hearing screening, earlier and more widespread use of cochlear implants) and communication and placement preferences to consider. All of these bring challenges to researchers whose job it is to find enough comparable deaf children on whom to base test norms. One consequence is that tests reporting deaf norms are generally based on fewer numbers than would be found in similar tests for hearing children. Although these smaller sample sizes represent a far larger proportion of the population of deaf children than is found in tests based on hearing children, their applicability to ***all*** deaf children requires careful consideration. It is therefore important that professionals who use language tests with deaf children take care when interpreting test results. Interpretation of test results should consider knowledge about the individual child and their language experiences and the extent to which these compare to children upon whom test norms are based.

The last decade has seen a number of developments in the language assessment of deaf children, in particular in relation to the assessment of sign language development (for a summary of international approaches to sign language assessment, see http://www.signlang-assessment.info). Below we present an overview of UK-based tests that are available to practitioners, in particular in the area of sign language assessment, including some that are currently under development.

The BSL Receptive Skills Test (Herman, Holmes & Woll, 1999).
This is a video-based test looking at comprehension of BSL sentences of increasing grammatical complexity. Norms are provided, derived from deaf children aged 3-13

years acquiring BSL as a first language. Data has also been reported on a separate sample of 181 children (Herman & Roy, 2006) and the test is used widely in UK settings, including research (e.g. a study currently underway at City University London to identify and characterise language impairment in BSL). A DVD version of the test will be available this year.
Contact: Ros Herman, email r.c.herman@city.ac.uk or purchase the test online at Forest Books: www.forestbooks.com

The BSL Production Test (Herman, Grove, Holmes, Morgan, Sutherland & Woll, 2004)
This test uses a story recall task to analyse narrative skills and grammatical development in BSL. Children watch a short, language free film and retell the story to a fluent signer. Norms are provided on deaf children aged 4-12 years acquiring BSL under optimal circumstances. For this test, attendance on a training course is necessary to become registered as a test user.
Contact: Ros Herman, email r.c.herman@city.ac.uk and find out more at http://www.city.ac.uk/lcs/compass/bsldevelopment/assessingbsldevelopment.html.

BSL MacArthur CDI (Woolfe, Herman, Roy & Woll, 2009)
The MacArthur Communicative Development Inventories are well established parent report tools that measures vocabulary development in children aged 8-36 months. The CDI have been translated into many spoken languages and a BSL version has now been developed with norms based on deaf native signers (i.e. children in deaf signing families). Information about the measure is available in the online publication (see below). Production of a published test is currently underway.
Contact: Bencie Woll, email: b.woll@ucl.ac.uk

Nonsense Sign Repetition Task (Mann, Marshall, Mason & Morgan, 2009)
This test measures how deaf children between 3-11 years learn different aspects of phonology in BSL, such as handshape, path, and movement. The task requires perception and production skills as well as the ability to remember a sign for a short time. This test is similar to the Children's Test of Non-Word Repetition (Gathercole & Baddeley, 1996). The test has been standardized and a trial version is available on request. This test is currently being used to investigate language impairment in BSL.
Contact: Wolfgang Mann, email wolfgang.mann.1@city.ac.uk

Test of Child Speechreading (Kyle, MacSweeney, Mohammed & Campbell 2009)
This is a child-friendly computer-based test that measures speechreading (silent lipreading) at three levels: words, sentences and short stories. The test has been standardized and is available for practitioners at no charge.
Contact: Fiona Kyle, email fek22@cam.ac.uk

BSL Vocabulary Test (Mann & Morgan, under development)
This web-based test assesses vocabulary development in deaf children aged 4-15 years using a combination of comprehension and production tasks. The test is currently being piloted and a UK-wide study will be conducted in 2010.
Contact: Wolfgang Mann, email wolfgang.mann.1@city.ac.uk and find out more at http://www.dcal.ucl.ac.uk/Research/bsl_vocabulary_test.html

Future developments
Among research currently underway at City University London is a project to investigate language impairment in BSL users aged 7-14 years. As well as using

available tests (see above) 2 new tests have been developed: a BSL Sentence Repetition Test and BSL Vocabulary Test. Following this project, we hope that these tests will be made more widely available. This will address the concerns of many professionals at the lack of assessments available for older deaf children.

Clearly, there has been good progress in the development of language assessments for deaf children in the UK. However, more work is clearly needed in this important area. We are aware of the demands that research places on schools, families and deaf children and are grateful for their ongoing support.

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